

NCIC HPV
Sent by: Mary-Beth
Weaver

04/1 8/2003 09:26 AM

To: NCIC HPV, moran.matthew@epa.gov

CC:

Subject: Environmental Defense comments on Arylpolyolefins category



Richard Denison@environmentaldefense.org on 04/17/2003 03:49:30 PM

To: oppt.ncic@epamail.epa.gov, hpv.chemrtk@epamail.epa.gov, Rtk Chem/DC/USEPA/US@EPA, Karen

Boswell/DC/USEPA/US@EPA. sarah_loftus@americanchemistry.com

cc: lucierg@msn.com, kflorini@environmentaldefense.org, rdenison@environmentaldefense.org

Subject: Environmental Defense comments on Arylpolyolefins category

(Submitted via Internet 4/17/03 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, boswell.karen@epa.gov, chem.rtk@epa.gov, lucierg@msn.com and sarah loftus@americanchemistry.com)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for Arylpolyolefins.

This test plan was prepared by the Health, Environmental Regulatory and Task Group (HERTG) of the American Chemistry Council, which is comprised of 10 member companies. The test plan covers two CAS Numbers: benzene C14-24 linear and branched alkaryl derivatives (115733-08-g); and benzene (68081-77-6). Both of the CAS Numbers are comprised polypropene derivatives of numerous chemicals based on the length and degree of branching of the alkyl side chains. The polypropene derivatives have a maximum side chain length of 82 carbons. These substances are used to synthesize alkaryl sulfonates (covered by a test plan submitted previously) and also are used as base fluids in various automotive fluids and in various lubricants. Therefore, there is opportunity for environmental releases and human exposure. In general, the linear alkaryl derivatives are biodegradable, but the highly branched derivatives present in the polypropenes are not.

The test plan is well-written and organized. It concludes that several additional studies need to be conducted to fulfill requirements of the HPV program. The sponsor proposes to conduct all required studies on the C14-C24 alkaryl derivatives and then use those data to bridge to the polypropene derivatives. However, there is little justification given for category formation, so we cannot concur at this time that no studies are needed directly on the polypropene derivatives. Specific comments are as follows:

- 1. What is the composition of the C14-C24 mixture and how variable is it? What will be the composition of the test substance and will it be representative of the commercial mixture?
- 2. We recommend that studies also be conducted on the polypropene derivatives. These materials are highly branched and they possess different physiochemical properties than the C14-C24 alkaryl derivatives. Since the polypropene derivatives are very water-insoluble, we recognize it is not feasible to conduct biodegradation and aquatic toxicology studies. However, repeat dose and reproductive/developmental studies should be done on the polypropenes. Information provided in the test plan and robust summaries provide convincing justification that the polypropene derivatives are not mutagenic, so we do not recommend mutagenicity studies for this group of substances.

3. We agree that the substances covered in this test plan are not acutely toxic, so no additional acute toxicity studies are needed. The sponsor might want to consider conducting a combined repeat dose/reproductive/developmental study on one or a few test substances representative of the mixture of the various compounds that comprise each of the two CAS Numbers, to minimize the use of animals.

Thank you for this opportunity to comment.

George Lucier, Ph.D.
Consulting Toxicologist, Environmental Defense

Richard Denison, Ph.D. Senior Scientist, Environmental Defense